AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the Application.

Listing of Claims

1. **(Cancelled)** ~~A method for diagnosing the presence or stage of cancer comprising detecting the level of a truncated CCAAT-displacement protein/Cut homeobox isoform in a sample wherein increased levels of a truncated CCAAT-displacement protein/Cut homeobox isoform is indicative of the presence or stage of cancer.~~

2. **(Cancelled)** ~~The method of claim 1 wherein the truncated CCAAT-displacement protein/Cut homeobox isoform comprises a proteolytically processed isoform of p200.~~

3. **(Cancelled)** ~~The method of claim 2 wherein the proteolytically processed isoform of p200 comprises p100 or p110.~~

4. **(Cancelled)** ~~The method of claim 1 wherein the truncated isoform of CCAAT-displacement protein/Cut homeobox comprises p75 or the RNA transcript encoding p75 polypeptide.~~

5. **(Cancelled)** ~~The method of claim 1 wherein detecting the level of a truncated CCAAT-displacement protein/Cut homeobox isoform comprises contacting a sample with an antibody which specifically recognizes a truncated CCAAT-displacement protein/Cut homeobox isoform so that said antibody binds to the truncated CCAAT-displacement protein/Cut homeobox isoform; detecting bound antibody; and comparing levels of the truncated CCAAT-displacement protein/Cut homeobox isoform to a known standard.~~

6. **(Cancelled)** ~~An antibody which specifically recognizes a proteolytically processed isoform of CCAAT-displacement protein/Cut homeobox p200.~~

7. **(Cancelled)** ~~The antibody of claim 6 wherein the proteolytically processed isoform of CCAAT-displacement protein/Cut homeobox p200 comprises p100 or p110.~~

8. **(Cancelled)** ~~An antibody which specifically recognizes the p75 isoform of CCAAT-displacement protein/Cut homeobox.~~

9. **(Cancelled)** ~~The method of claim 1 wherein detecting the level of a CCAAT-displacement protein/Cut homeobox isoform comprises evaluating the level of RNA transcript encoding a p75 polypeptide and comparing p75 RNA transcript levels in a sample with a known standard.~~

10. **(Cancelled)** ~~A kit for detecting the presence of a CCAAT-displacement protein/Cut homeobox isoform comprising an antibody which specifically recognizes a CCAAT-displacement protein/Cut homeobox isoform.~~

11. **(New)** A method of detecting a level of an amino-terminally truncated CDP/Cux polypeptide variant in a sample wherein said polypeptide variant is:

a) a variant which is encoded by a nucleic acid produced from transcriptional initiation within intron 20 of the CDP/Cux locus;
b) a variant which is encoded by a CDP/Cux mRNA comprising a translation start site within exon 21;
c) a variant which lacks Cut repeat domains CR1 and CR2;
d) a variant which contains only two DNA binding domains; or
e) any combination of a)-d).

12. **(New)** The method of claim 11, wherein said variant contains only two DNA binding domains which are Cut repeat domain 3 (CR3) and Cut homeodomain (HD).

13. **(New)** The method of claim 11, wherein said variant is p75.

14. **(New)** The method of claim 11, wherein detecting the level of said variant comprises:

a) contacting said sample with an antibody which binds to said variant;

b) identifying the level of said bound antibody; and

c) comparing said level of said bound antibody to a known standard.

15. **(New)** The method of claim 11, wherein detecting the level of said variant comprises:

a) contacting said sample with an antibody which binds to a CDP/Cux polypeptide;

b) identifying the level of said bound antibody;

c) determining the size of said variant; and

d) comparing said level of said bound antibody to a known standard.

16. **(New)** The method of claim 11, wherein said sample is derived from breast tissue from a patient having or suspected of having breast cancer.

17. **(New)** The method of claim 11, wherein said sample is derived from blood from a patient having or suspected of having acute myeloid leukemia (AML).

18. **(New)** The method of claim 16, wherein detection of p75 in said breast tissue identifies said patient as having breast cancer.

19. **(New)** The method of claim 17, wherein detection of p75 in said blood identifies said patient as having acute myeloid leukemia (AML).

20. **(New)** The method of claim 11, wherein said variant is detected in combination with an additional CDP/Cux polypeptide which is:

a) p200;
b) p110;
c) p100; or
d) any combination of a)-c).

21. **(New)** A method of eliciting an immune response in a host species comprising introducing into said host, one or more times, a composition comprising a purified amino-terminally truncated CDP/Cux polypeptide variant, or fragment thereof, wherein said polypeptide variant is:

a) a variant which is encoded by a nucleic acid produced from transcriptional initiation within intron 20 of the CDP/Cux locus;
b) a variant which is encoded by a CDP/Cux mRNA comprising a translation start site within exon 21;
c) a variant which lacks Cut repeat domains CR1 and CR2;
d) a variant which contains only two DNA binding domains;
e) a variant of a)-d) fused to a carrier molecule or polypeptide; or
f) any combination of a)-e).

22. **(New)** The method of claim 21, wherein said variant contains only two DNA binding domains which are Cut repeat domain 3 (CR3) and Cut homeodomain (HD).

23. **(New)** The method of claim 21, wherein said variant is p75.

24. **(New)** The method of claim 21, wherein said composition is co-administered with one or more immunological adjuvant.

25. **(New)** The method of claim 21, wherein said composition comprises a vector or DNA sequence encoding said variant or a fragment thereof, alone or fused to a carrier molecule or polypeptide.

26. **(New)** A kit for detecting a level of an amino-terminally truncated CDP/Cux polypeptide variant in a sample wherein said polypeptide variant is:

a) a variant which is encoded by a nucleic acid produced from transcriptional initiation within intron 20 of the CDP/Cux locus;
b) a variant which is encoded by a CDP/Cux mRNA comprising a translation start site within exon 21;
c) a variant which lacks Cut repeat domains CR1 and CR2;
d) a variant which contains only two DNA binding domains; or
e) any combination of a)-d); said kit comprising:

- a first vessel containing a reagent enabling the formation of an immune complex, wherein said immune complex comprises:

i) an antibody which recognizes an amino-terminally truncated CDP/Cux polypeptide variant; and

ii) an amino-terminally truncated CDP/Cux polypeptide variant that is:

I) a variant which is encoded by a nucleic acid produced from transcriptional initiation within intron 20 of the CDP/Cux locus;

II) a variant which is encoded by a CDP/Cux mRNA comprising a translation start site within exon 21;

III) a variant which lacks Cut repeat domains CR1 and CR2;

IV) a variant which contains only two DNA binding domains; or

V) any combination of I)-IV); and

- a second vessel containing a detecting reagent for identifying said immune complex.

27. **(New)** The kit of claim 26, wherein said detecting reagent is a second antibody conjugated to:

a) an enzyme;

b) a radioactive isotope;

c) a fluorescent molecule;

d) a chemiluminescent molecule; or

e) any combination of a)-d).

28. **(New)** The kit of claim 26, comprising guidelines for the detection of p75.